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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,353	09/09/2003	Farni Weaver	2285	2116
28005	7590	08/30/2006	EXAMINER	
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OVERLAND PARK, KS 66251-2100			2617	

DATE MAILED: 08/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/658,353

Applicant(s)

WEAVER ET AL.

Examiner

Kamran Afshar, 571-272-7796

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 10, 21, 23, 25-26, and 28-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21, 23, 25, 26, 28 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 21, 23, 25-26, and 28-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Wingrowicz (U.S. Pub. No.: 2004/0203717 A1).

With respect to claim 21, Wingrowicz discloses a system (See e.g. Fig. 2) comprising: a mobile station (See e.g. MS, Page 2, Line 6 of ¶ [0024], 210-220 of Fig. 2, Page 3, Line 16 of ¶ [0025]); a base station (See e.g. BS, Page 2, Line 12-13 of ¶ [0024], 202-208 of Fig. 2, Page 3, Line 15 of ¶ [0025]) communicatively coupled to the mobile station (See e.g. MS performing call, Page 2, ¶ [0023]) ; wherein the mobile station is arranged to engage in a call over an air interface (See e.g. Page 3, Line 49 of ¶ [0025]); and wherein the base station is arranged to: (i) make a determination that the call in which the mobile station was engaged has been dropped (See e.g. BS / cell, MS, parameters, dropped call, handoff failure, call loss, call event, blocked call, radio related problems, etc. Page 2, Lines 19-27 of ¶ [0024]); and (ii) responsive to making the determination that the call in which the mobile station was engaged has been dropped, cause position determining equipment (PDE) to determine a call-drop location of the mobile station (See e.g. BS send / report related data or parameters to network, position request to a PDE, Page 2, Line 27 of ¶ [0024] – Page 3, Line 50 of ¶ [0024]).

Regarding claim 23, Wingrowicz discloses the base station being arranged to make the determination that the call in which the mobile station was engaged has been dropped comprises the base station being arranged to make the determination that a duration of bad frames received from the

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mobile station is greater than a threshold level (See e.g. Dropped call, handoff failure, BER values or level, etc. Page 3, Lines 13-20 of ¶ [0028], given time period, Page 4, Lines 21-28 of ¶ [0028]).

Regarding claim 25, Wingrowicz discloses wherein the base station comprises memory (See e.g. 230, 106, 232, 115 of Fig. 2); and wherein the base station is further arranged to store the call-drop location in the memory to thereby log locations of call drop events (See e.g. Page 3, Lines 21-28 of ¶ [0025], Page 4, Lines 21-35 of ¶ [0028]).

Regarding claim 26, Wingrowicz discloses the base station being arranged to make the determination that the call in which the mobile station was engaged has been dropped comprises the base station being arranged to make the determination that the call cannot be handed off to another a cell-site (See e.g. parameters, dropped call, handoff failure, call loss, call event, blocked call, radio related problems, etc, Page 3, Lines 13-20 of ¶ [0028]).

With respect to claim 28, Wingrowicz discloses a base station (See e.g. BS, Page 2, Line 12-13 of ¶ [0024], 202-208 of Fig. 2, Page 3, Line 15 of ¶ [0025]) comprising: a first routine to make a determination that a call in which a mobile station was engaged has been dropped (See e.g. BS / cell, MS, parameters, dropped call, handoff failure, call loss, call event, blocked call, radio related problems, etc. Page 2, Lines 19-27 of ¶ [0024]); and a second routine to cause position determining equipment (PDE) to determine a call-drop location of the mobile station in response to the first routine making the determination that the call in which the mobile station was engaged has been dropped (See e.g. BS send / report related data or parameters to network, position request to a PDE, Page 2, Line 27 of ¶ [0024] – Page 3, Line 50 of ¶ [0024]).

With respect to claim 29, Wingrowicz discloses a system (See e.g. Fig. 2) comprising: a mobile station (See e.g. MS, Page 2, Line 6 of ¶ [0024], 210-220 of Fig. 2, Page 3, Line 16 of ¶ [0025]); a base station (See e.g. BS, Page 2, Line 12-13 of ¶ [0024], 202-208 of Fig. 2, Page 3, Line 15 of ¶ [0025]) communicatively coupled to the mobile station (See e.g. MS performing call, Page 2, ¶ [0023]) ; wherein the mobile station is arranged to engage in a call over an air interface (See e.g. Page 3, Line 49 of ¶ [0025]); and wherein the base station is arranged to: (i) make a determination that the call in which the mobile station was engaged has been dropped (See e.g. BS / cell, MS, parameters, dropped call, handoff

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failure, call loss, call event, blocked call, radio related problems, etc. Page 2, Lines 19-27 of ¶ [0024]); and (ii) responsive to making the determination that the call in which the mobile station was engaged has been dropped, cause position determining equipment (PDE) to determine a call-drop location of the mobile station (See e.g. BS send / report related data or parameters to network, position request to a PDE, Page 2, Line 27 of ¶ [0024] – Page 3, Line 50 of ¶ [0024]) by: sending a location request to a mobile switching center (MSC) (See e.g. 230 of Fig. 2), the location request including an ID identifying the mobile station (See e.g. location request, MS identification (MSID), Page 4, Lines 27-28 of ¶ [0028]), Lines ; the MSC sending a position request to a mobile positioning center (MPC); the MPC forwarding the position request to the PDE (See e.g. 230, 232, 234 of Fig. 2); and the PDE responsively determining the location of the mobile station (See e.g. Page 3, Lines 21-28 of ¶ [0025], Page 4, Lines 21-35 of ¶ [0028]).

Allowable Subject Matter

3. With respect to the amended claim 1, Claims 1, 3 and 10 are allowed.

The following is an examiner's statement of reasons for allowance: 1, 3 and 10.

With respect to claim 1, the prior art of record fails to disclose singly or in combination or render obvious that the method comprising: the base station making a determination that the call has been dropped; and responsive to the base station making the determination that the call has been dropped, determining a call-drop location of the mobile station, wherein making the determination that the call in which the mobile station was engaged has been dropped comprises determining, at the base station that a duration of bad frames received on a reverse traffic channel (RTCH) carrying communications from the mobile station to the base station is greater than a threshold level, wherein the base station determines that no call-drop event has occurred if a duration of good frames are received at the base station from the mobile station within a predefined period of time after receiving the duration of bad frames, wherein determining the call-drop location comprises the base station sending a position request to the PDE to determine the location of the mobile station, the position request including a mobile identification number (M1N) identifying the mobile station.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Wingrowicz (U.S. Patent 6,970,721 B1).

b) Satapathy (U.S. Pub. NO.: 2004/203607 A1).

c) Merritt (U.S. Pub. No.: 2005/0054339 A1)

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kamran Afshar whose telephone number is (571) 272-7796. The examiner can be reached on Monday-Friday.

If attempts to reach the examiner by the telephone are unsuccessful, the examiner's supervisor, **Feild, Joseph** can be reached @ (571) 272-4090. The fax number for the organization where this application or proceeding is assigned is **571-273-8300** for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Kamran Afshar

JEAN GELIN
PRIMARY EXAMINER
